ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of:		
Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems	))))	CC Docket No. 94-102

COMMENTS OF GTE MOBILNET INCORPORATED

GTE Service Corporation on behalf of its telephone and wireless companies ("GTE") respectfully submits its comments on the Commission's Public Notice regarding an *ex parte* presentation entitled, "Public Safety-Wireless Industry Consensus: Wireless Compatibility Issues, CC Docket 94-102."[1] GTE generally supports the *Agreement*'s goals, but believes that the Phase I and Phase II implementation deadlines require further study.

I. INTRODUCTION

In the *Agreement*, the Cellular Telecommunications Industry Association ("CTIA") and three public safety organizations -- the National Emergency Number Association ("NENA"), the Association of Public Safety Communications Officials ("APCO"), and the National Association of State Nine One One Administration ("NASNA") -- concurred on a number of proposals to allow for the more rapid introduction of wireless enhanced 911 (E911) service. First, in Phase I, within 12 or 18 months, wireless carriers must provide "cell site information using 7 or 10 digit

[1] DA 96-108 (released Feb. 16, 1996) ("*Agreement*").

pseudo-ANI [automatic number identification] and a 7 or 10-digit caller ANI (*i.e.*, calling party number), depending on the local landline network's signaling capability."[2] Second, in Phase II, within 5 years, wireless carriers must provide "the ability to locate, in latitude and longitude, a wireless caller within 125 meters Root Mean Square."[3] The *Agreement* further discussed liability issues,[4] a funding mechanism for 911 providers,[5] the availability of wireless E911 service,[6] access for the hearing and speech-impaired,[7] and the elimination of the call back requirement.[8]

GTE supports the initiative that CTIA and the noted public safety organizations have taken to implement E911 requirements. Moving toward E911 compatibility with CMRS is extremely important, especially in light of the imminent growth of wireless communications. Accordingly GTE supports much of the *Agreement*. Nevertheless, it is concerned that the Phase I requirements, as stated in the *Agreement*, may be misconstrued by members of the public who expect rapid wireless access to wireless 911 service. Further, it is premature to comment on the feasibility of a five year Phase

---

[2] *Agreement* at 1-2.

[3] *Id.* at 2-3.

[4] *Id.* at 4.

[5] *Id.* at 3.

[6] *Id.* at 5.

[7] *Id.* at 4.

[8] *Id.* at 4.

II implementation plan, or an accuracy requirement, given the unproven performance of location technologies in commercial wireless networks. Finally, GTE requests that the Commission explicitly clarify that cellular carriers can not be held liable for failure to provide location information of the required accuracy.

II. THE PHASE I REQUIREMENTS ARE ATTAINABLE, BUT THEY DEPEND ON OTHER PARTIES' CONCURRENT ACTIONS

GTE is confident that wireless carriers will be capable of providing both ANI (for call back) and pseudo-ANI (for cell site location) to PSAPs within 18 months from adoption of an E911 rulemaking. However, the implementation schedule will require that cellular carriers such as GTE modify their networks, and that a number of disparate parties work in concert in order to implement Phase I.

At present, GTE's cellular network is only capable of transmitting either ANI *or* pseudo-ANI. Therefore, in order to transmit both of these numbers, GTE must install new software and trunks for each cellular switch. Further, because ANI must be transmitted from a wireless carrier to the PSAP through the local exchange carrier ("LEC") network, the success of meeting Phase I requirements depends equally on the cooperation of the PSAPs and some LECs. As is the case with cellular carriers, PSAPs and some LECs must also implement new switching, signaling, routing, and de-coding equipment.

In order for GTE to fully review and intelligently comment on the proposed Phase I requirements, more technical detail is needed. Specifically, GTE needs more information regarding each responsible party's obligations to provide both pseudo-ANI

and ANI and which entity is responsible for coordinating these obligations and setting standards. First, standards need to be defined. Manufacturers must then produce the equipment. At this point, cellular providers, LECs and the public safety community will have to work with their respective equipment manufacturers to test this equipment. All of this must be done prior to actual implementation.

Recognition of these interdependencies, and their related implementation issues, some of which are beyond GTE's control, need to be fully articulated so that the public will not be confused or misinterpret the wireless providers' responsibility. A mislead public will expect wireless E911 compatibility sooner than is technically realistic. Unfortunately, if these expectations are not met, wireless customers are likely to blame the party with which they have a contractual relationship -- their wireless carrier.

III. BECAUSE GTE BELIEVES THE EMERGING LOCATION TECHNOLOGIES HAVE NOT BEEN FULLY FIELD TESTED, IT IS PREMATURE TO SET EITHER AN IMPLEMENTATION DATE OR A REQUIRED ACCURACY FOR WIRELESS ALI

GTE has not field tested any of the emerging location technologies, and therefore cannot determine how successful their implementation will be in each of its service areas. Absent such rigorous field testing, GTE cannot predict the relative ease or difficulty by which wireless ALI will be implemented. Therefore, while GTE does not oppose a five-year implementation schedule, it is premature at this time to commit to a definitive date for Phase II implementation.

Similarly, listing a specific probability or location accuracy as a requirement is not practical at this time because performance could vary from one test to another

depending on a number of factors, including: (1) testing methods; (2) environmental conditions; and (3) terrain. Any location accuracy requirement should also consider that rural areas may not provide the same level of accuracy as metropolitan areas. Because any requirement to maintain the same level of accuracy in rural areas may require construction of additional towers and sensors, the Commission should carefully consider whether such a requirement can be cost-justified. Two additional issues that may have an impact on the selection of viable technologies for wireless location are requirements for: (1) location of calls made from moving vehicles; and (2) time limits, if any, for determination of the location of a call. The Commission should address these requirements in their E911 rulemaking. Finally, it is not yet clear whether the location technology solution will be a network based or handset based solution.

In order to solve these problems, GTE recommends that the FCC charge an industry work group, similar to the parties to this agreement, with the task of establishing a work plan to meet milestone dates, disseminate information to the industry, and report back to the Commission relative to implementing E911. The FCC should ensure that this work group reflects a well-balanced industry representation, including equipment manufacturers, local exchange carriers, wireless carriers, and members of the safety community. Through this process or sequence of steps, a realistic implementation date for Phase II can be determined.[9]

---

[9] GTE would obviously be an active member in this work group effort to determine E911 implementation.

IV. WIRELESS CARRIERS SHOULD NOT INCUR LIABILITY FOR FAILURE TO LOCATE A CALLER WITHIN THE REQUIRED 125 METER AREA

The *Agreement* discusses carrier and PSAP liability issues.[10] With regard to the 125 meter root mean square accuracy standard, GTE requests that the Commission include explicit language stating that wireless providers are not required to meet the required location accuracy 100 percent of the time. In fact, GTE notes that the *Agreement* does include some discussion of cases where the 125 meter standard may be difficult or impossible to meet.[11] GTE urges the Commission to expand this discussion by including specific language that clearly exonerates wireless providers of any and all legal liability associated with location estimates.

V. GTE GENERALLY SUPPORTS THE PROPOSALS REGARDING 911 AVAILABILITY, HANDICAPPED ACCESS, AND RE-RING CAPABILITY

In addition to setting forth a two-phased implementation schedule, the *Agreement* put forth proposals regarding the availability of 911 service, access by handicapped callers, and re-ring capability. GTE generally supports these portions of the *Agreement*.

---

[10] *Agreement* at 4.

[11] *Agreement* at 3 n.8.

Both the Notice of Proposed Rulemaking,[12] and the *Agreement*[13] state that wireless E911 services must be provided without user validation to subscribers in their home service area and to roamers. GTE supports this requirement of 911 availability subject to certain limitations. As GTE noted in its opening comments in this docket, cellular and other wireless carriers cannot deliver 911 calls in geographic locations where 911 emergency service is not provided. In addition, GTE's ability to handle 911 calls is limited to areas where it has built out its network in accordance with its license requirements.

The *Notice*[14] and the *Agreement* also state that wireless 911 access should be available to "speech- and hearing-impaired individuals through means other than voice-only mobile radio handsets, such as text telephone (TTY) devices."[15] GTE supports the requirement to the extent that it provides such service through cellular circuit switched data service. Through this service, TTY devices can continue to be utilized in GTE's networks for 911 emergency communications.

Finally, the *Agreement* calls for the elimination of the requirement that PSAPs be capable of automatically re-establishing a connection with disconnected wireless

---

[12] FCC 94-237, ¶ 41 (released October 19, 1994) ("*Notice*").

[13] *Agreement* at 5.

[14] *Notice*, ¶ 54.

[15] *Agreement* at 4.

callers.[16] GTE agrees that wireless networks should not be required to emulate the "automatic re-ring" features of the wireline network at this time. As pointed out in the *Agreement*, the ANI requirement will allow PSAPs to call back disconnected callers, assuming their phone is turned on, thereby obviating the need for automatic re-ring.[17]

VI. GTE BELIEVES THAT 911 FUNDING SHOULD BE UNDER STATE JURISDICTION

Regarding a funding mechanism for wireless E911, GTE believes that states, rather than the FCC should define the funding (tax or surcharge) requirements with regard to 911 service. Because most states are directly and regularly involved in this process, any federal rules prescribing funding methods or requirements could potentially disrupt current 911 funding systems. However, for matters of consistency and efficient administration, GTE believes that local cities and towns should not be allowed to prescribe the funding requirements associated with 911.

VII. CONCLUSION

GTE supports the rapid implementation of wireless access to E911 service. However, because it must work in concert with a disparate group of PSAPs and some LECs in order to implement the Phase I requirements, GTE believes that these pre-conditions must be explicitly stated as a condition to meeting the 12 to 18 month deadline. In addition, the untested nature of wireless ALI equipment makes it

---

[16] *Id.* at 4.

[17] *Id.*

premature to offer meaningful comment on the proposed Phase II deadline. Finally, because of the uncertainty of radio frequency transmissions, wireless carriers should be held harmless for any errors they make in providing location information to PSAPs.

Respectfully submitted,

GTE MOBILNET INCORPORATED

By: _____

Andre J. Lachance
GTE SERVICE CORPORATION
1850 M Street, N.W.
Suite 1200
Washington, D.C. 20036
(202) 463-5276

March 4, 1996

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Comments Of GTE Mobilenet, Incorporated" were served this 4 day of March, 1996 by first class mail, postage prepaid, on the parties on the attached list.

Stephen J. Rosen

James S. Blaszak
Ellen G. Block
Levine, Balszak, Block & Boothby
1300 Connecticut Avenue, N.W.
Suite 500
Washington, D.C. 20036

Jim Conran
Ad Hoc Alliance for Public
Access to 911
P.O. Box 2346
Orinda, CA 94563

Glenn S. Rabin
ALLTEL Mobile Communciations
655 15th Street, N.W.
Suite 220
Washington, D.C. 20005

Elizabeth R. Sachs
Lukas, McGowan, Nace & Gutierrez
1111 19th Street, N.W.
Suite 1200
Washington, D.C. 20036

Frank Michael Panek
Ameritech
Room 4H84
2000 West Ameritech Center Drive
Hoffman Estates, IL 60196-1025

Lon C. Levin
AMSC Subsidiary Corp.
10802 Park Ridge Boulevard
Reston, VA 222091

Bruce D. Jacobs
Glenn S. Richards
Fisher Wayland Cooper
Leader & Zaragoza
2001 Pennsylvania Avenue, N.W.
Suite 400
Washington, D.C. 20006

William F. Adler
Steven N. Teplitz
Fleischman & Walsh
1400 Sixteenth Stret, N.W.
Washington, D.C. 20036

Robert M. Gurss
Wilkes, Artis, Hedrick & Lane
1666 K Street, N.W.
Suite 1100
Washington, D.C. 20006

James R. Hobson
Donelan, Cleary, Wood & Maser
1100 New York Avenue, N.W.
Suite 750
Washington, D.C. 20005

William B. Barfield
Jim O. Llewellyn
BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

Charles P. Featherstun
David G. Richards
BellSouth Corporation
1133 21st Street, N.W.
Suite 900
Washington, D.C. 20036

Gary O'Malley
Cable Plus
11400 SE 6th Street, Suite 120
Bellevue, WA 98004

Peter Arth, Jr.
Edward W. O'Neill
Ellen S. Levine
People of the State of
California and the Public
Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Michael F. Altschul
CTIA
1250 Connecticut Avenue, N.W.
Suite 200
Washington, D.C. 20036

Adam A. Andersen
CMT Partners
651 Gateway Boulevard
15th Floor
South San Francisco, CA 94080

Thomas Gutierrez
Lukas, McGowan, Nace & Gutierrez
Suite 1200
1111 Nineteenth Street, N.W.
Washington, D.C. 20036

J.D. Hersey, Jr.
Chief, Maritime Radio and
Spectrum Management
United States Coast Guard
2100 Second Street, S.W.
Washington, D.C. 20593-0001

Alicia A. McGlinchey
COMSAT Mobile Communications
22300 COMSAT Drive
Clarksburg, MD 20871

Robert A. Mazer
Rosenman & Colin
Suite 200
1300 19th Street, N.W.
Washington, D.C. 20036

Paul R. Schwedler
Carl W. Smith
Regulatory Counsel
Telecommunications, DoD
Defense Information Sys Agency
Code DO1
701 S. Courthouse Road
Arlington, VA 22204

David C. Jatlow
Young & Jatlow
Suite 600
2300 N Street, N.W.
Washington, D.C. 20037

Danny E. Adams
Ann M. Plaza
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Susan H.R. Jones
Gardner, Carton & Douglas
1301 K Street, N.W.
Suite 900, East Tower
Washington, D.C. 20005

Andre J. Lachance
David J. Gudino
GTE Service Corporation
1850 M Street, N.W.
Suite 1200
Washington, D.C. 20036

B.J. Smith
911 Emergency Telephone
Operations
Hillsborough County, Office
of the County Administrator
P.O. Box 1110
Tampa, FL 33601

Robert S. Koppel
Richard S. Whitt
IDB Mobile Communications, Inc.
15245 Shady Grove Road
Suite 460
Rockville, MD 20850

Brian R. Moir
Moir & Hardman
2000 L Street, N.W.
Suite 512
Washington, D.C. 20036-4907

S.A. Penington
Chairman, Interagency Committee
on Search & Rescue
United States Coast Guard
2100 Second Street, N.W.
Washington, D.C. 20593-0001

Charles J. Hinkle, Jr.
KSI Inc.
7630 Little Rive Turnpike
Suite 212
Annandale, VA 22003

Paul C. Besozzi
D. Cary Mitchell
Besozzi, Gavin & Craven
1901 L Street, N.W.
Suite 200
Washington, D.C. 20036

Thomas H. Bugbee
Bruce Malt
Regulatory Affairs
Telecommunications Branch
Information Technology Services
P.O. Box 2231
Downey, CA 90242

Larry A. Blosser
Donald J. Elardo
MCI Telecommunications Corp.
1801 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Michael D. Kennedy
Michael A. Menius
Motorola, Inc.
1350 I Street, N.W.
Suite 400
Washington, D.C. 20005

Paul Rodgers
Charles D. Gray
James Bradford Ramsay
NARUC
1102 ICC Building
P.O. Box 684
Washington, D.C. 20044

George N. Rover
Deputy Attorney General
AOG/Legal Affairs
State of New Jersey
Hughes Justice Complex
CN 080
Trenton, N.J. 08625-0080

Robert S. Foosaner
Lawrence R. Krevor
Laura L. Holloway
Nextel Communications, Inc.
800 Connecticut Avenue, N.W.
Suite 1001
Washington, D.C. 20006

Albert H. Kramer
Robert F. Aldrich
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse Suite
Washington, D.C. 20005-3919

Lyle V. Gallagher
State 911 Coordinator
Emergency Services Communication
System Advisory Committee
P.O. Box 5511
Bismarck, N.D. 58502-5511

Stephen L. Goodman
Halprin, Temple & Goodman
1100 New York Avenue, N.W.
Suite 650 East
Washington, D.C. 20005

John G. Lamb
Northern Telecom Inc.
2100 Lakeside Boulevard
Richardson, TX 75081-1599

Edward R. Wholl
Jacqueline E. Holmes Nethersole
NYNEX Companies
120 Bloomingdale Road
White Plains, N.Y. 10605

Lisa M. Zaina
OPASTCO
21 Dupont Circle, N.W.
Suite 700
Washington, D.C. 20036

David C. Yandell
Technology and Operations
Section, Emergency Management
Division, Oregon State Police
595 Cottage Street, NE
Salem, OR 97310

James P. Tuthill
Betsy Stover Granger
Pacific Bell
140 New Montgomery Street
Room 1525
San Francisco, CA 94105

James L. Wurtz
Pacific Bell
1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Naomi L. Wu
Communications Manager
Port Angeles Police Dep't
321 East 5th Street
Port Angeles, WA 98362

Mark J. Golden
Personal Communciations Industry
Association
1019 - 19th Street, N.W.
Suite 1100
Washington, D.C. 20036

Michael J. Celeski
Pertech America, Inc.
One Illinois Center
111 East Wacker Drive
Suite 500
Chicago, IL 60601

Mary A. Boyd
JEM Co-Chair
Texas Emergency Communications
Commission
1101 Capital of TX Hghwy, South
Austin, TX 78749

Gary Jones
JEM Co-Chair
Omnipoint Corporation
1365 Garden of the Gods Rd
Colorado Springs, CO 80907

C.C. Lee
Proctor & Associates
15050 Northeast 36th
Redmond, WA 98052-5317

Jerome S. Caplan
Redcom Laboratories, Inc.
One Redcom Center
Victor, N.Y. 14564-0995

David L. Jones
Rural Cellular Association
2120 L Street, N.W.
Suite 520
Washington, D.C. 20037

James D. Ellis
Mary Marks
SBC Communications, Inc.
175 E. Houston, Suite 1306
San Antonio, TX 78205

Wayne Watts
Bruce E. Beard
Southwestern Bell Mobile Systems
17330 Preston Road
Suite 100A
Dallas, TX 75252

Jean L. Kiddoo
Shelley L. Spencer
Swidler & Berlin
3000 K Street, N.W.
Suite 300
Washington, D.C. 20007

Peter J. Tyrrell
Springwich Cellular L.P.
227 Church Street
Room 1021
New Haven, CT 06510

Leonard Schuchman
Systems Integration Group
Stanford Telecom
1761 Business Center Drive
Reston, VA 22090

Raul R. Rodriguez
Stephen D. Baruch
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, D.C. 20006

Alfred Sonnenstrahl
Telecommunications for the Deaf
8719 Colesville Road
Suite 300
Silver Spring, MD 20910

R. Michael Senkowski
Jeffrey S. Linder
Ilene T. Weinreich
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Dan Bart
Eric Schimmel
Ron Angner
Jese Russell
TIA
2500 Wilson Boulevard, Suite 300
Arlington, VA 22201

Michael J. Miller
Telident, Inc.
4510 West 77th Street
Suite 101
Minneapolis, MN 55435

David Kelley
Terrapin Corp.
11958 Monarch Street
Garden Grove, CA 92641

Scott A. Sawyer
Assistant Attorney General
Consumer Protection Division
Public Agency Representation
P.O. Box 12548
Capitol Station
Austin, TX 78711-2548

Norman P. Leventhal
Stephen D. Baruch
David S. Keir
J. Breck Blalock
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, D.C. 20006

Jeffrey S. Bork
U S West
1020 - 19th Street, N.W.
Suite 700
Washington, D.C. 20036

Jeffrey L. Sheldon
Thomas E. Goode
UTC
1140 Connecticut Avenue, N.W.
Suite 1140
Washington, D.C. 20036

Arthur A. Butler
Sara Siegler-Miller
Ater Wynne Hewitt Dodson
& Skerritt
601 Union Street
Suite 5450
Seattle, WA 98101-2327

Robert G. Oenning
State of Washington
Statewide E911 Program
1417 - 6th Avenue S.E.
P.O. Box 48346
Olympia, WA 98504-8346

Martin W. Bercovici
Keller & Heckman
1001 G Street, N.W.
Suite 500W
Washington, D.C. 20001-4545

James Carlsen
Westinghouse Electri Corp.
Electronic Systems Group
P.O. Box 746 - MS A475
Baltimore, MD 21203

ITS, Inc. *
1919 M Street, N.W.
Room 246
Washington, D.C. 20554

* BY HAND

William T. Bradfield
Tendler Cellular
65 Atlantic Avenue
Boston, MA 02110

Lorri Ann Ericson
Puyallup City Communications
1531 39th Avenue S.E.
Puyallup, WA 98374

Michael L. King
Anacortes Communications Center
Anacortes Police Department
1011 - 12th Street
Anacortes, WA 98221

Betsy L. Anderson
1320 N. Court House Road
Eighth Floor
Arlington, VA 22201